

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/559,655 Confirmation No. : 5590
First Named Inventor : Klaus WOLTER
Filed : May 12, 2006
TC/A.U. : 3644
Examiner : Brian M. O'Hara
Docket No. : 102167.57012US
Title : Method for Supporting a Propelled Flying Object During Take-Off
and/or Landing

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Sir:

Appellant respectfully requests a review of the final rejection set forth in the Office Action dated September 17, 2010. Appellant submits that the anticipation and obviousness rejections based upon U.S. Patent No. 3,771,747 to Mednikow ("Mednikow") should be withdrawn, because Mednikow does not expressly or inherently disclose each of the limitations of claims 46 and 54. Also, U.S. Patent No. 3,196,822 to Bertin *et al.* ("Bertin") fails to make up for the deficiencies of Mednikow with respect to claim 58.

I. Mednikow fails to disclose the feature of claim 46 of "enriching the provided fluid current in response to the detected information by at least one substance of higher specific density to increase its deceleration effect and/or its acceleration effect, respectively"

The Office Action states that the fire extinguisher 7 disclosed in Mednikow is an element that enriches the provided fluid current.¹ However, there is no support for this statement. The Office Action refers to col. 3, line 25, in this regard, but the cited portion of the reference does not explicitly or implicitly refer to the fire extinguishers.

Instead, it only mentions that a preferred embodiment of the invention includes "two or more conventional or desired radar transmitters or receivers located on opposite sides of the movable landing strip(s) such that the optimum speed(s) of the moving surface(s) and the optimum direction and intensities of air currents may be automatically calculated by preferably an interconnected computer and the computer automatically and/or operator

¹ Page 2, numbered paragraph 2, lines 9-14.

manually may initiate the movements, directions, and intensities.”² In the context of Mednikow’s disclosure, however, the moving surfaces and air currents only refer to the belts, rollers, blowers and baffles used to produce and direct the air currents as an aircraft approaches.³ There is no disclosure that the moving surfaces or air currents relate to the fire extinguishers.

The Advisory Action dated December 6, 2010 states that Mednikow, in col. 3, lines 33-34, teaches an automatic control system that includes fire extinguishers. The cited excerpt, however, only discloses that the radar transmitter and/or electric eye may be *mounted on or adjacent to* a fire extinguisher. It does not disclose any kind of *control* of the fire extinguisher. Mednikow also mentions the presence of fire extinguishers 7 in col. 4, lines 38-39, but this disclosure also fails to describe any kind of *control* of the fire extinguishers. There are no other references to the fire extinguishers in Mednikow. Thus, Mednikow’s device may include fire extinguishers, but there is no explicit or implicit disclosure that the fire extinguishers are configured such that they enrich the provided fluid current.

In fact, the concept employed by Mednikow is quite different from that of the present invention. Instead of disclosing a device in which the contents of fire extinguishers (or any other substance) are used to enrich the provided fluid current, Mednikow discloses a device in which the surroundings of an aircraft are modified to increase the amount of *air* passing over the aircraft. Specifically, the device includes a series of consecutive moving surfaces (*e.g.*, belts and rollers), the speed of which is changed when the aircraft is landing or taking off to achieve the effect of having more *air* pass over the aircraft.⁴ The above-described blowers and baffles are used to control the air flow. In other words, instead of enriching the provided fluid current, Mednikow discloses a device that increases the amount of air itself.

² Col. 3, lines 18-26.

³ See, *e.g.*, col. 2, lines 1-30.

⁴ Col. 2, lines 1-16.

In view of the foregoing, it is clear that Mednikow's disclosure does not provide support for the interpretation that the fire extinguishers perform the act of enriching the provided fluid current.

A. Enriching the provided fluid current in response to detected information

The Advisory Action states that Mednikow "implicitly describes a system which is capable of detecting whether a flying object is in need of fire extinguishing fluids and then applying the fire extinguishing fluids during a take-off or landing."⁵ Appellant submits that this statement is not supported by Mednikow. Although Mednikow discloses that its device may include fire extinguishers, it does not include any description of how the fire extinguishers are controlled or how they are used.

On the other hand, Mednikow describes in detail the control of the belts, rollers, blowers, and baffles of its device to direct air currents toward approaching aircraft.⁶ In particular, the reference describes the use of radar transmitters/receivers to control the speed and movement of the belts, rollers, blowers and baffles, respectively.⁷ The discussion of controlling the air currents, however, fails to include *any* discussion of the fire extinguishers.

Due to the lacking disclosure of how the fire extinguishers are used in Mednikow's device, it is very likely that the fire extinguishers are limited to being used only after an aircraft has landed. Moreover, there simply is no support for the assumption that the fire extinguishers enrich the provided fluid current in response to detected information. In fact, with regard to fire extinguishers, the disclosure of Mednikow is limited to the idea that they can be present in the device.

⁵ Continuation sheet, lines 4-6.

⁶ See col. 2, *et seq.*

⁷ Col. 3, lines 17-26.

B. Enriching the provided fluid current by a substance of higher specific density

Mednikow only discloses a device in which the amount of provided fluid current is increased with the air being blown by the blowers having the same specific density as the provided fluid current. Accordingly, it does not disclose *enriching* the provided fluid current by a substance of a *higher specific density*.

The Advisory Action asserts that the fire extinguishers must use substances that are more dense than air,⁸ but, as described above, the fire extinguishers disclosed by Mednikow do not perform the act of enriching the provided fluid current. Moreover, there is no support for the assumption that the contents of the fire extinguishers are more dense than air.

Therefore, Appellant submits that claim 46 is patentable over Mednikow. Independent claim 54 is patentable for reasons analogous to those for claim 46.

II. Mednikow fails to disclose the features of claims 65-68

With respect to claims 65 and 67, Mednikow does not disclose any determination of whether enriching the air current provided by the blowers is needed to achieve a required acceleration or deceleration effect. In fact, the Office Action has not pointed to any portion of the reference as allegedly disclosing this feature of the claims. Instead, the Office Action has made an unsupported assertion that Mednikow discloses it.

Likewise, the Office Action has provided no support for its assertion that Mednikow discloses the features of claims 66 and 68 regarding the detection of speed, height, weight, or shape information of the flying object. As recited in independent claims 46 and 54, the provided fluid current is enriched in response to this detected information. Although Mednikow discloses the use of radar to determine aircraft speed, it does not disclose using

⁸ Continuation sheet, lines 9-10.

this speed information to enrich the provided fluid current by at least one substance of higher specific density to increase its deceleration effect and/or its acceleration effect, respectively.

III. The Mednikow/Bertin combination fails to disclose the features of claim 58

The Office Action⁹ relies on Bertin as disclosing “a cooling element for cooling down the fluid current,” even though none is provided. Implicitly acknowledging the lack of a cooling element, the Office Action states that a cooling element would have been obvious in view of the heat exchanger disclosed by Bertin. The purpose of the heat exchanger in Bertin is to reduce the relative humidity of a gas,¹⁰ but this effect cannot be achieved by cooling an airstream. Thus, the cooling element of claim 58 is neither disclosed nor suggested by Bertin.

IV. Conclusion

Since Mednikow and Bertin fail to teach or suggest the above-described features of the claims, Appellant respectfully submits that the prior art rejections are improper and should be withdrawn.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323, Docket No. 102167.57012US.

CROWELL & MORING LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844
MHJ:CWB:msy

Respectfully submitted,

/Michael H. Jacobs/
Michael H. Jacobs
Registration No. 41,870

Date: February 15, 2011

⁹ Page 5.

¹⁰ Col. 4, lines 22-43.